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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/701,104	04/24/2001	Fritz Magerl	LUD-PT002-PA1083US	6204

3624 7590 03/23/2005

VOLPE AND KOENIG, P.C.  
UNITED PLAZA, SUITE 1600  
30 SOUTH 17TH STREET  
PHILADELPHIA, PA 19103

EXAMINER
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CHEVALIER, ALICIA ANN

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No. <sup>BU</sup>

09/701,104

Applicant(s)

MAGERL ET AL.

Examiner

Alicia Chevalier

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 3-8, 10-15 and 19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3-8, 10-15 and 19 is/are allowed.
- 6) ☒ Claim(s) 11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **RESPONSE TO AMENDMENT**

1. Claims 3-8, 10-15 and 19 are pending in the application, claims 1, 2, 9, 14, 16-18 have been cancelled.
2. Amendments to the claims, filed on November 10, 2004, have been entered in the above-identified application.

### ***REJECTIONS***

3. **The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.**

### ***Claim Objections***

4. Claim 11 is objected to because of the following informalities: "approx." should be approximately. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

5. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Loher et al. (WO 96/19336) in view of Sicurelli.

Loher discloses components made of fiber-reinforced thermoplastic materials used as connecting elements, particularly for use in medical technology for bone screws (*page 1, lines 12-17*).

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Regarding Applicant's claim 1, Loher discloses a composite of polymer or ceramic material (*title*) for the manufacture of components used in biological implants (*bone screws, page 1, lines 12-17*).

The composite comprises fibers (*carbon fibers, page 3, lines 29-30*) that do not absorb substantial amounts of x-rays (*x-ray-transparent, page 9, lines 1-2*) located in a polymer or ceramic material (*PAEK (polyaryl ether ketones), page 3, line 29*).

Loher further discloses tat the total percentage of fibers should be approximately 50% by volume (*page 4, line 29*).

Loher fails to disclose x-ray absorbing reinforcing fibers distributed within the composite throughout the fibers that do not absorb substantial amounts of x-rays in a defined manner to provide x-ray visibility control for the biological implant components.

Sicurelli discloses a component used as a dental post implant (*col. 14, lines 10*) or for other types of bone implants to reduce resorption bone dissolution due to stress or infection (*col. 11, lines 20-23*).

Sicurelli discloses a component (*post, col. 14, lines 10*) made from a composite of polymer or ceramic material (*reinforced plastics, col. 14, line 11*) having x-ray absorbing reinforcing fibers (*steel or platinum fibers, col. 14, lines 15-18*) distributed throughout the composite (*figures 12 and 13*). Applicant gives examples of x-ray absorbing reinforcing fibers such as steel, tantalum, tungsten, gold, platinum etc. (*Applicant's specification page 4, lines 23-30*).

From figures 12 and 13 it can be seen that the x-ray absorbing reinforcing fibers have an orientation tailored to the shape and application of the component, i.e. dental post implant (*col. 7, line 66*), in a defined manner.

Sicurelli does not explicitly teach “an orientation of the x-ray absorbing fibers ... to provide x-ray visibility control for the component.” However, it is reasonable to presume that Sicurelli’s post, i.e. component, would meet the above limitation because Sicurelli’s post is substantially identical in composition and structure to Applicant’s disclosed component. MPEP § 2183. The Examiner’s basis for this assertion is that Sicurelli’s post has the same x-ray absorbing fibers, i.e. steel or platinum, and the fibers have an orientation tailored to the shape and application of the component.

Loher and Sicurelli are analogous because they both discuss bone implants.

It would have been obvious to one of ordinary skill in the art at the time of the invention to add Sicurelli’s metal x-ray absorbing fibers to Loher’s component in order to bone strength. One of ordinary skill in the art would have been motivated to use metal x-ray absorbing fibers because it helps to reduce resorption bone dissolution due to stress or infection (*Sicurelli col. 11, lines 20-23*).

***Allowable Subject Matter***

6. Claims 3-8, 10, 12-15 and 19 allowed.

***ANSWERS TO APPLICANT'S ARGUMENTS***

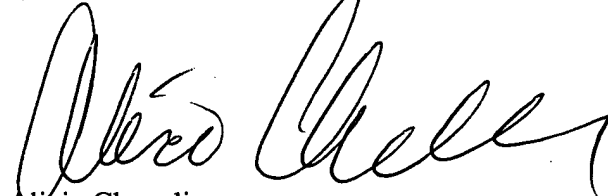
7. Applicant's arguments in the response filed November 10, 2004 regarding the previous rejections of record have been considered but are moot due to the new grounds of rejection.

***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Chevalier whose telephone number is (571) 272-1490. The examiner can normally be reached on Monday through Friday from 8:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Alicia Chevalier', is written over the printed name.

Alicia Chevalier

8/22/04